FUTURE DEFINING

Woolsey Fire – Use Case Study

How the National Park Service Acquired Actionable Data Using Quantix UAS

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It's been over a year since the devastating Woolsey Fire burned more than 96,000 acres across Los Angeles and Ventura Counties. The fire destroyed 88% of National Park Service land within the Santa Monica Mountains Recreation Area and set in motion a need for an environmental impact study to assess fire damage in key areas of the park. The National Park Service reached out to AeroVironment for assistance, and the flight operation's team began flying Quantix as soon as the park service clearance was obtained.

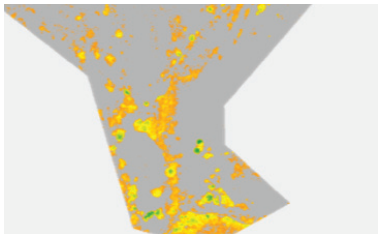
Quantix waits in position for takeoff at Paramount Ranch in the Santa Monica Mountains National Recreation Area. Photo credit: Eric Thompson

"Within hours of receiving clearance, the flight team had Quantix in the air over the affected burn area collecting valuable aerial imagery data and providing any support needed to help the park's disaster assessment and recovery efforts," said AeroVironment Flight Operations Manager Eric Thompson.

Quantix quickly surveyed the area gaining actionable insights into the scope and scale of the damage. The main focus was to analyze plant health to determine whether oak trees and vegetation in the fire's path would survive. The National Park Service used the collected data to determine which vegetation areas would need to be restored. They expressed their gratitude for the team's efforts and their outstanding contribution to support the recovery strategy.

"AeroVironment's Quantix drone and Decision Support System have been a valuable tool in helping our team assess the environmental impact of the Woolsey Fire," said Jamie Richards, public information officer, National Park Service Western Incident Management Team. "Their response and support has been incredible."

In recognition of the team's outstanding disaster assistance, Thompson received an IEEE Project of the Year award from the local Buenaventura Section. The inscription reads: *To recognize your help to the Park Rangers and the value the Quantix drone provided in assessing the damage caused by the Woolsey Fire.*



Quantix imagery shows Paramount Ranch after the Woolsey Fire. The Normalized Difference Vegetation Index (NDVI) was used by National Park Service scientists to analyze vegetation and plant health. Grey areas indicate bare ground; yellow areas show severely impacted plant life; and green areas represent surviving plants. Satellite imagery prior to the fire was used for comparison.

Eric Thompson receives an IEEE Project of the Year Award on March 28, 2019, for the Woolsey Fire recovery efforts.

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